

# GeometryQuiz02: Circles

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## Question 1

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Find the circumference of a circle with radius 7 cm.

## Question 2

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Calculate the area of a circle with a diameter of 10 cm.

## Question 3

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If two circles have radii in the ratio 3:4, find the ratio of their circumferences.

## Question 4

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A sector of a circle has an angle of  $60^\circ$  and a radius of 6 cm. Find the length of the arc of the sector.

## Question 5

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The area of a circle is  $78.5 \text{ cm}^2$ . Find its radius.

## Question 6

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A chord of a circle is 12 cm long, and the distance from the center of the circle to the chord is 5 cm. Find the radius of the circle.

### Question 7

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Find the length of a chord which is 6 cm away from the center of a circle with a radius of 10 cm.

### Question 8

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In a circle, the measure of an inscribed angle is  $45^\circ$ . What is the measure of the corresponding central angle?

### Question 9

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Two tangents are drawn to a circle from an external point. If the distance between the tangents at the points of tangency is 8 cm, find the radius of the circle.

### Question 10

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Find the area of a sector with radius 4 cm and central angle  $120^\circ$ .